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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/718,916	11/21/2003	James R. VanSickle	41575-255	2395

29493 7590 01/13/2005
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EXAMINER

SANTOS, ROBERT G

ART UNIT PAPER NUMBER

3673

DATE MAILED: 01/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/718,916

Applicant(s)

VANSICKLE, JAMES R.

Examiner

Robert G. Santos

Art Unit

3673

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 11/21/2003, 7/09/2004 and on 7/14/2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8, 10-15 and 17-26 is/are rejected.
- 7) ☒ Claim(s) 9 and 16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 07092004.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Claim Objections

1. Claim 10 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 10 recites the limitation wherein “time control of the check valve is by at least one perforation in a flow control plate”, which is the same in scope as the limitation set forth in claim 8.

2. Claims 1, 4, 6, 8, 11, 14, 15, 17, 18 and 23 are objected to because of the following informalities:

- 1) In line 5 of claim 1; in line 1 of claims 4, 6, 11, 14 and 17; and in line 2 of claims 15, 18 and 23: The phrase --at least one-- should be inserted before the term “cushion”.
- 2) In claim 8, line 1: The term “inlet” should be changed to --check--.
Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. Claims 4 and 5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant

regards as the invention. Claims 4 and 5 each contain a limitation which clearly contradicts the limitations set forth in independent claim 1, thereby rendering claims 4 and 5 indefinite.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

5. Claims 1-3, 7, 11-14, 19 and 21 are rejected under 35 U.S.C. 102(e) as being anticipated by Lin '981. Lin '981 shows the claimed limitations of a self inflating pneumatic seat cushion apparatus comprising a pumping chamber (1) having an air inlet (111) and at least one outlet tube (31), the pumping chamber being filled with resilient foam (13); and at least one cushion bladder (A) in operative communication with the pumping chamber via the at least one outlet tube, the at least one cushion bladder being filled with resilient foam (as shown in Figures 1, 2, 4

Art Unit: 3673

& 6) and the cushion bladder having an exhaust valve (4), the exhaust valve having an adjustable pressure release (as described in column 2, lines 58-61) whereby a user may selectively control pressure in the pumping chamber and the at least one cushion bladder. As concerns claims 2 and 3, the reference is considered to show the use of a check valve (2, 3) in the at least one outlet tube and in the air inlet in Figures 1-3 and in column 2, lines 5-24. As concerns claim 7, the examiner respectfully asserts that the reference discloses a condition wherein the valve (2) is inherently time controlled due to its structure (see Figure 2 and column 2, lines 8-12). With regards to claim 11, the examiner respectfully asserts that the at least one cushion bladder (A) may be inherently positioned on a "seat bottom." As concerns claims 12 and 13, the reference discloses the use of at least one bolster containing foam (see Figure 8). With regards to claim 14, the reference is considered to show a condition wherein the pumping chamber (1) is adjacent to the cushion bladder (A) in Figures 1, 2, 4, 6 & 8. As concerns claims 19 and 21, the reference is considered to show a condition wherein the check valves (2, 3) in the air inlet and in the at least one outlet tube are preconfigured to open at a pressure that is greater than atmospheric pressure in column 2, lines 26-33.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 3673

4. Claims 4, 5 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin '981 in view of Forsberg '502. Lin '981 does not specifically disclose conditions wherein the at least one cushion bladder and the pumping chamber do not contain foam and wherein the pumping chamber is at least partially within the at least one cushion bladder. Forsberg '502 provides the basic teaching of a self inflating cushion apparatus comprising a pumping chamber (14) an at least one cushion bladder (12) which do not contain foam, wherein the pumping chamber is at least partially within the at least one cushion bladder. The skilled artisan would have found it obvious at the time the invention was made to provide the apparatus of Lin '981 with at least one cushion bladder and a pumping chamber which do not contain foam and wherein the pumping chamber is at least partially within the at least one cushion bladder in order to provide a simpler and more economical construction for the apparatus as desired.

5. Claims 6 and 24-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin '981 in view of U.S. Pat. No. 6,240,584 to Perez. Lin '981 lacks the use of a dump valve and an adjuster for the dump valve. Perez '584 provides the basic teaching of an inflatable cushion apparatus (12) provided with at least one dump valve (112, 131, 133, 146, 148, 162) and an adjuster (172) therefor. The skilled artisan would have found it obvious at the time the invention was made to provide the apparatus of Lin '981 with a dump valve and an adjuster for the dump valve in order to allow the apparatus to be more readily deflated as desired.

6. Claims 8, 10, 18, 20 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin '981. As concerns claims 8 and 10, Lin '981 discloses the use of a check valve (2)

Art Unit: 3673

affixed to the pumping chamber (1) by a plurality of spots (21) in order to form a plurality of air vents (22) as opposed to at least one perforation formed in a flow control plate as claimed. The skilled artisan would have found it obvious to replace the check valve of Lin '981 with a flow control plate having at least one perforation formed therein since such a modification would have been generally recognized as being a substitution of art-recognized equivalents.

With regards to claims 18, 20 and 22, Lin '981 does not specifically disclose a condition wherein the foam (13) in the pumping chamber or the foam in the at least one cushion bladder has a density (rating) of substantially about 110/1 8ILD, nor does Lin '981 disclose the use of check valves in the at least one outlet tube and in the air inlet which are preconfigured to close at a pressure of about 0.5 PSIG. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the apparatus of Lin '981 with foam in the pumping chamber or foam in the at least one cushion bladder having a density of substantially about 110/1 8ILD and with check valves in the at least one outlet tube and in the air inlet which are preconfigured to close at a pressure of about 0.5 PSIG, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

7. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lin '981 in view of Harris '160. Lin '981 does not specifically disclose a condition wherein at least one of the at least one cushion bladder or the pumping chamber is made from a material selected from the group consisting of urethane and a nylon/urethane blend. Harris '160 provides the basic teaching of an inflatable cushion apparatus (3) which is formed from urethane (as described in column 3,

Art Unit: 3673

lines 23-27). The skilled artisan would have found it obvious at the time the invention was made to provide the apparatus of Lin '981 with at least one of the at least one cushion bladder or the pumping chamber being made from a material selected from the group consisting of urethane and a nylon/urethane blend since this type of material "provides a [support surface] which has been found to allow transmission of water vapor at a rate sufficient to prevent sweating, but which is substantially impermeable to air", thus allowing the apparatus to "sustain its inflated state for long periods", thereby facilitating use of the apparatus and ensuring enhanced user comfort (see Harris '160, column 3, lines 27-33).

8. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lin '981 in view of Mirando '696. Lin '981 does not specifically disclose a condition wherein the foam (13) in at least one of the pumping chamber or the at least one cushion bladder has air chambers. Mirando '696 provides the basic teaching of an inflatable cushion apparatus (10) provided with a pumping chamber (14) filled with open-celled foam (15). The skilled artisan would have found it obvious at the time the invention was made to provide the apparatus of Lin '981 with foam in at least one of the pumping chamber or in the at least one cushion bladder having air chambers in order to facilitate inflation of the apparatus, thereby ensuring proper user support and comfort.

Allowable Subject Matter

9. Claims 9 and 16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The examiner respectfully asserts that one of ordinary skill in the art

Art Unit: 3673

would not have found it obvious at the time the invention was made to provide the apparatus of Lin '981 with a "time controlled" check valve in the at least one outlet tube as recited in claim 9, nor would it have been obvious at the time the invention was made to incorporate the apparatus of Lin '981 into a folding seat as recited in claim 16.

Conclusion

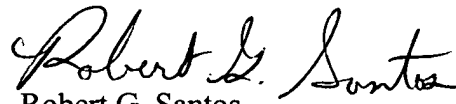
10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. VanSickle '684, Richardson '326, Perez et al. '013, Perez et al. '883, Perez et al. '579, Perez et al. '512, Larson '963, Chen '041, Hunter '174, Edwards '008, Dunham '991, Marcus '941, Pinkwater '494, Hurt '736, Houghton '134 and Hargin '037.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert G. Santos whose telephone number is (703) 308-7469. The examiner can normally be reached on Tues-Fr and first Mondays, 10:30 a.m. to 8:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather C. Shackelford can be reached on (703) 308-2978. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3673

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Robert G. Santos
Primary Examiner
Art Unit 3673

R.S.
January 9, 2005